WHAT IS CLAIMED IS:

1. A method of normalizing an output of a receiver, the method comprising:

determining a normalization factor; and

applying the normalization factor to the output of the receiver.

2. The method of Claim 1, further comprising normalizing each symbol output from the receiver.

3. The method of Claim 1, further comprising obtaining a metric correction factor from the normalization factor.

4. The method of Claim 1, further comprising providing the metric correction factor to a channel decoder.

5. The method of Claim 1, further comprising determining the log likelihood ratio (LLR) according to the following equation:

$$LLR(n) = -\frac{2r(n)g(n)}{\sigma_T^2(n)}$$

where:

r(n) is the detector output of the n^{th} symbol;

g(n) is the time varying gain associated with the desired signal; and

$\sigma_T^2(n)$ is the total noise variance..

6. The method of Claim 5, further comprising determining the total noise variance analytically.

7. The method of Claim 5, further comprising determining the total noise variance empirically.

8. The method of Claim 1, further comprising employing multiuser detection to obtain the output of the receiver.

9. A receiver comprising:

a detector which receives transmitted information and provides one or more output symbols based on the transmitted information;

a metric correction section which normalizes the one or more output symbols to obtain a metric; and

a channel decoder which receives the metric from the metric correction section, the channel decoder utilizing the metric to decode the transmitted information.

10. The receiver of Claim 9, wherein the detector is a multiuser detector.

11. The receiver of Claim 9, wherein the detector is a rake detector.

12. The receiver of Claim 9, wherein the metric is a log likelihood ratio.

13. The receiver of Claim 9, wherein the metric correction section determines a normalization factor to apply to the output symbols of the detector.

14. The receiver of Claim 9, wherein the detector is a long code CDMA detector.

15. The receiver of Claim 14, wherein the metric correction section normalizes each output symbol on a symbol by symbol basis.

16. The receiver of Claim 9, wherein the metric of a log likelihood ratio for BPSK signaling is determined from the following equation:

$$LLR(n) = -\frac{2r(n)g(n)}{\sigma_{\mathrm{T}}^{2}(n)}$$

where:

r(n) is the detector output of the n^{th} symbol;

g(n) is the time varying gain associated with the desired signal; and

$\sigma_{\mathrm{T}}^{2}(n)$ is the total noise variance..

17. The receiver of Claim 16, wherein the total noise variance is determined analytically.

18. The receiver of Claim 16, wherein the total noise variance is determined empirically.

19. A method comprising:

receiving one or more output signals from a detector;

determining a normalization factor for each of the one or more output signals;

multiplying each of the one or more output signals by the corresponding normalization factor to obtain a metric correction; and

providing the metric correction for each symbol to a channel decoder.

20. The method of Claim 19, further comprising decoding a transmission using the metric correction.

21. The method of Claim 19, further comprising determining the metric correction log likelihood ratio metric according to the following equation:

$$LLR(n) = -\frac{2r(n)g(n)}{\sigma_T^2(n)}$$

where:

r(n) is the detector output of the n^{th} symbol;

g(n) is the time varying gain associated with the desired signal; and

$\sigma_{T}^{2}(n)$ is the total noise variance..

22. The method of Claim 21, further comprising determining the total noise variance analytically.

23. The method of Claim 21, further comprising determining the total noise variance empirically.